ORIGINAL RESEARCH

Challenges Facing Canadian Long-Term Care Homes and Retirement Homes During the COVID-19 Pandemic

Christine Fahim, PhD, MSc, Ayaat T. Hassan, MSc, Keelia Quinn de Launay, MSc, Alyson Takaoka, MSc, Elikem Togo, MPH, Lisa Strifler, MSc, Vanessa Bach, BPH, Nimitha Paul, MPH, Ana Mrazovac, MSc, Jessica Firman, MPH, Vincenza Gruppuso, PhD, Jamie M. Boyd, MSc, Sharon E. Straus, MD, MSc

Knowledge Translation Program, Li Ka Shing Knowledge Institute, St. Michael's Hospital, Unity Health Toronto, Toronto ON

https://doi.org/10.5770/cgj.28.854

ABSTRACT

Background

COVID-19 exposed long-standing systemic challenges experienced by congregate settings and created a crisis for long-term care homes (LTCHs) and retirement homes (RHs). This study explored the pandemic-related challenges LTCHs and RHs faced and the strategies they used to mitigate them.

Method

Ninety-one key informant interviews were held with LTCH and RH leadership across 47 homes (33 LTCHs, 14 RHs) in Ontario, Canada from February 2021 to July 2022. Data were analyzed following the framework method.

Results

Findings confirmed evidence of three main challenges. First, leaders were challenged to implement infection prevention and control (IPAC) protocols and measures. Second, leaders required supports to facilitate COVID-19 vaccine access and to promote vaccine acceptance. Finally, LTCH/RH staff experienced well-being and mental health challenges in the face of COVID-19 pressures. Despite widespread attention and efforts to support these congregate settings, challenges persisted over one year into the pandemic.

Conclusions

Our findings reveal a plethora of strategies implemented by homes, with ranging reports of perceived success.

Key words: COVID-19, long-term care, retirement homes, infection prevention, vaccine uptake, staff well-being

INTRODUCTION

The COVID-19 pandemic created a crisis in long-term care homes (LTCH) and retirement homes (RH). In Canada, LTCH, also known as nursing homes, are settings where residents are provided with supports for daily activities, including 24-hour nursing care. Residents of LTCH are individuals for whom care needs cannot be safely provided through home or community-based services (e.g., older adults with dementia). LTCH in Canada can be public or private, with privately owned LTCH including for-profit and non-profit organizations.[1] In the province of Ontario, applications to LTCH are managed through Ontario Health, a provincial government health agency.[2] In contrast, RH are typically better suited for individuals who are able to live independently but may require some daily supports, such as meals or grooming. Retirement homes in Ontario are regulated by the Retirement Homes Regulatory Authority (RHRA),[3] are usually privately owned, and are paid for directly by residents.

In the spring of 2020, >75% of COVID-related deaths in Canada were associated with LTCH and RH.[4,5] In Ontario, Canada, >230 LTCH had COVID-19 outbreaks and LTCH residents accounted for 77% of COVID-19 deaths.[6,7] LTCH and RH workers were also at risk, comprising a significant portion of Ontario cases and several deaths in early pandemic stages.[8,9]

COVID-19 exposed long-standing system gaps in the LTCH/RH sector.[10] A Royal Society of Canada report on COVID-19 and long-term care details these systemic failures including inadequate pay, training and protections for long-term care staff, insufficient staff mix, and environments that are not designed to care for residents' increasingly complex medical and social needs.[10] Despite an abundance of evidence on the needed solutions, these gaps persisted for over five decades.[11] This was the context facing LTCH and RH staff, leaders, and residents at the onset of the COVID-19 pandemic.

In the initial months of COVID-19, Canada experienced a far higher proportion of total COVID-19 deaths in LTCH compared to its counterparts. These conditions were especially pronounced in the province of Ontario, due to coordination

gaps between governments, hospitals and homes, funding shortages, and staff shortages.[12] In response, the Ontario Ministry of Health mandated that acute care hospitals support LTCH to implement Infection Prevention and Control (IPAC) protocols and mitigate outbreaks.[13] While not included in the mandate, RH were also encouraged to adhere to these protocols. Despite this support, LTCH and RH leaders were challenged to implement these IPAC protocols amidst a rapidly-evolving pandemic. It was in this context that we aimed to design a responsive support program for Ontario LTCH and RH to navigate COVID-19 challenges.

To inform the content of our program that was expected to be delivered over a 24-month period, we conducted a robust needs assessment with LTCH and RH in the province of Ontario, which is home to >600 LTCH and >780 RH,[3] and one of the Canadian provinces hardest-hit by COVID-19.[14] Specifically, our objectives were to: 1) explore the challenges faced by LTCH and RH leadership staff to navigate the pandemic; and 2) to identify supports currently in place to address COVID-19 challenges. In this article, we present the findings of our needs assessments, which were conducted using key informant interviews with LTCH and RH leaders.

METHODS

We report our study findings using the Consolidated Criteria for Reporting Qualitative Research (COREQ). We conducted qualitative needs assessments using the Framework Method, which provides a systematic yet flexible approach that includes both inductive and deductive coding to generate qualitative themes.[15]

Background and Context

In Appendix S1 in the supplemental material, we describe our process of designing this study, including the COVID-19 context at time of study initiation.

Study Design

We conducted semi-structured needs assessment interviews with LTCH and RH leaders to explore pandemic-related challenges, experiences implementing strategies to address these challenges, and needed supports. We used a rapid analysis approach to analyze our data in order to facilitate timely development of the support program.[16]

Sampling and Setting

Our study was conducted in the province of Ontario (population 15.5 million), Canada. The Greater Toronto Area (GTA) is the most densely populated area in Ontario (population >6.2 million),[17] and was home to many "COVID hotspots" in the province.[18] Outbreaks in these hotspots were correlated with social determinants of health including income, level of education, higher proportions of visible minorities, housing density, and occupation.[19,20] We primarily sampled homes in the GTA and its surrounding regions. Homes were eligible to participate in our study if leaders 1) consented to participation, 2) were located in Ontario, and 3) designated a communication 'point person' within the home. Homes unable to meet these criteria were excluded from the study, as were Indigenous LTCH and RH, given that our study team did not have the appropriate expertise and resources to meaningfully support these partnerships.

Participant Recruitment

Study advertisements were shared using study websites, our project partners, and social media. LTCH and RH leaders (defined as decision-makers responsible for day-to-day operations in an individual LTCH or RH) were eligible to participate in an interview.

Data Collection

We assembled a multidisciplinary study steering committee which included LTCH/RH organizations, caregivers, clinicians, and researchers. We held in-depth discussions with the steering committee to co-design an interview guide for the needs assessment.[21] While our initial goal was to identify challenges related to IPAC protocol implementation, the committee highlighted that homes were experiencing additional challenges. These included challenges keeping up to date with rapidly evolving COVID-19 public health policies and directives, supporting uptake of COVID-19 vaccines among residents and staff, and supporting staff who were experiencing burnout and mental health challenges amidst shortages and pandemic pressures. Using these insights, we developed an interview guide that first asked participants to describe their experiences working in LTCH/RH during the pandemic, identify challenges experienced during COVID-19, and describe solutions implemented to address these challenges. We then probed into the three identified challenge areas related to implementation of IPAC, vaccine, and staff well-being supports, to gain further insights on these themes identified by our steering committee.

Data were collected between February 2021 and July 2022. Participants took part in a 20- to 25-minute semi-structured interview (Table S1 in the supplemental material) via phone or Zoom (https://zoom.us/) conducted by an interviewer (AT, KQD, AH, JF, MSc or MPH) and note-taker (AM, VB, OS, BSc or BPH). Verbal consent and interviews were recorded. Notes were taken as close to verbatim as possible, in keeping with rapid analysis methodology.[16] Notes were reviewed for accuracy and supplemented using the recordings.[16] Participants were de-identified and assigned a unique study ID. Participants were not compensated.

Characteristics of Interviewers

Interviewers were research coordinators from the Knowledge Translation Program at St. Michael's Hospital. They were all women and had experience in qualitative research, implementation, or community-based participatory approach research. A detailed reflexivity statement is provided in Appendix S2 in the supplemental material.

Data Analysis

Using a rapid analysis approach in keeping with the framework method,[21] data were double-coded by research staff and trainees (KQD, LS, ET, AH, JF). First, the research team familiarized themselves with the data, then developed a codebook by double-coding five transcripts using open coding. The team double-coded fifteen interviews; remaining interviews were single-coded by two researchers (AH, MSc; LS, PhD). Following the indexing of the codes, the researchers and a scientist (CF, PhD) themed and interpreted the data.[15] We provided exemplar quotes for each illustrated theme to provide thick descriptions of the study data.

Funding and Ethics

This study was funded by the COVID-19 Immunity Task Force and the John and Myrna Daniels Charitable Foundation via the University of Toronto. This study received ethics approval from the Unity Health Toronto Research Ethics Board (REB 20-347).

RESULTS

Participant Characteristics

We conducted 91 key informant interviews with LTCH or RH leadership staff across 47 homes (33 LTCH and 14 RH) between February 2021 and July 2022. Our sample included privately owned for-profit homes (63.8%; 18 LTCH and 12 RH), as well as privately owned non-profit (17.0%; 6 LTCH and 2 RH), and publicly owned, non-profit homes (19.2%; 9 LTCH) (Table 1).

The median number of floors in each home was three (range 1–8), with 128 beds (range 21–391) and 129 staff per home (range 10–528). The majority of the homes were located in the Greater Toronto and Hamilton areas (n=35).

TABLE 1.
Demographic characteristics of homes

Characteristic	*N=47*	*n (%)*
Home funding status	Privately owned, for profit	30 (63.8)
	Privately owned, non-profit	8 (17.0)
	Publicly owned, non-profit	9 (19.2)
Year home was built	1900 – 1959	4 (8.5)
	1960 – 1979	17 (36.2)
	1980 – 1999	14 (29.8)
	2000 – 2019	12 (25.5)
	Median	*Range*
Number of floors	3	1 - 8
Number of beds	128	21 - 391
Number of filled beds	100	9 - 378
Number of staff currently working at the home	129	10 - 528

Challenges Facing LTCH & RH during the Pandemic & Strategies Implemented

We categorized our findings into implementation of IPAC protocols and measures, facilitation of access and uptake of COVID-19 vaccines, and addressing staff well-being. In Tables 1– 4, we describe challenges pertaining to each of these categories and the strategies used by home leadership to address them.

Infection Prevention and Control

We identified ten challenges related to IPAC implementation during the COVID-19 pandemic (Table 2). These included insufficient resources and time to deliver IPAC education and preparation (e.g., mask fitting); lack of consistent IPAC implementation by staff and residents due to limited capacity to follow protocols (e.g., proper masking); difficulties keeping up with rapidly evolving COVID-19 protocols and mandates; resource shortages (including personal protective equipment [PPE] and COVID-19 rapid tests); impact of the physical home structure on IPAC implementation (e.g., lack of physical space to cohort and distance staff and residents); family pushback on IPAC protocols; staff PPE fatigue; and fears of returning to normal and loosening IPAC restrictions. To address these challenges, homes commonly leveraged external supports from hospitals and public health units to receive updates on COVID-19 mandates, protocols, and their implementation, in addition to physical (e.g., equipment), financial, and human resources. Homes found it useful to have a dedicated IPAC champion to provide advice, guidance, and staff support. Some homes implemented multi-pronged strategies (e.g., huddles, use of champions, handouts, training) to facilitate IPAC uptake; others also implemented routine audits. Other levers to IPAC implementation included having leaders who were committed to transparent and open communication, leaders with previous experience managing health emergencies, and homes with physical space conducive to IPAC cohorting and isolation.

COVID-19 Vaccines

Notably, participants reported that the majority of LTCH and RH staff were supportive of COVID-19 vaccines. However, we identified six challenges to COVID-19 vaccine uptake in LTCH and RH (Table 3). Barriers at the individual staff level included mistrust around vaccine safety, beliefs that COVID-19 boosters would not improve health outcomes, and beliefs that vaccine mandates were an infringement on labour laws and personal liberties. Some staff did not feel comfortable working with residents or colleagues who were unvaccinated, which led to workplace conflict and tension. Furthermore, family members concerned about vaccine safety did not provide consent for LTCH residents to receive the vaccines.

Also reported were logistical barriers, including a lack of knowledge or ability to access a vaccine clinic, challenges using the online booking systems, and lack of vaccine availability due to Canada-wide supply chain issues. In particular, some RH leaders reported that their homes, unlike LTCH, were not prioritized to receive the COVID-19 vaccines, and

TABLE 2 (part 1 of 4).
IPAC challenges and strategies implemented

IPAC Challenges Experienced by LTCH/RH During the COVID-19 Pandemic		
Theme	*Description of Theme*	*Quote*
Delivering IPAC education in the LTCH setting was time consuming, resource intensive.	Educating staff on IPAC measures was very time consuming and resource intensive, as leadership had to adapt standard IPAC education to the context of the COVID-19 pandemic and outbreaks.	"The education around the change in direction and general IPAC measures is time consuming. The documentation and audits are time consuming." (P1018) "People are not retaining the information or applying it consistently." (P1018) "Lots of educational needs for the staff during the outbreak, they thought that they had a good understanding of what they needed at the time but there were a lot of PPE practices or general knowledge where there was misunderstanding and miseducation about some things from the media." (P1008)
Staff did not implement IPAC guidance consistently.	Sites experienced inconsistent implementation of IPAC protocols from their staff, such as not always social distancing, not maintaining consistent hand hygiene, and irregularity with how staff wore PPE.	"We are struggling with consistently maintaining IPAC precautions like cleaning and distancing. People relax over time and we can't allow them to relax. It is a struggle to get the point across gently." (P1018) "And then compliance, with making sure they're wearing their PPE. It's been a huge factor. They determined we should wear goggles at all times, as well as other IPAC criteria. Buy-in from staff has been difficult. We notice a lot of times on the unit, we notice that goggles are not worn, or worn on the top of their heads." (P1022)
Residents with limited capacity were not able to follow IPAC protocols.	Staff experienced challenges ensuring residents with dementia follow IPAC protocols. There were challenges around keeping PPE on residents with dementia, ensuring that they maintained hygiene (i.e., handwashing), and maintaining isolation of ill residents.	"They cannot keep it on. Our residents are more in the advanced stages, you cannot put PPE on them, you cannot confine them to their rooms… So we had to isolate those who didn't. It was reversed isolation- those that were negative were isolated." (P1214) "In my observation we have residents that are dealing with dementia and agitation, we have one floor where we have residents wandering all the time… Hard to do isolation because residents won't stay in their rooms… Those are the challenges for me would be managing IPAC while managing those residents safely… For example changing the linens after toileting a resident and making sure they're washing their hands properly." (P1029)
Homes had a hard time keeping up with rapidly evolving protocols and communicating changes to families/ caregivers and staff, which led to confusion, fear, anxiety and anger.	Directions and protocols were constantly changing, making it difficult for staff to keep track of current protocols and practices. This was especially true for RH who did not always have tailored public health guidance available to them. Many sites had difficulty keeping up with the updates as a result, and experienced challenges with effectively communicating the ongoing changes in IPAC protocol to staff, residents, and caregivers/families.	"There has been so much information and so many changes in information, it's almost information overload, each week something changes. The uptake is not as fast and other things move quickly. Keeping up with changes and how to message to staff here's what we used to do vs. here is what we need to do now." (P1016) "Every time we think we're – oh okay right now we are doing this but a week later it changes to something else. It is hard to keep up with." (P1206) "The ever-changing directives, conflicting, nuanced directives, and the institutionalization of the directives have had a tremendously negative impact on the Retirement sector. For residents coming in it has resulted in deconditioning, fear, anxiety, mental health and depression and that's real. Every surge has been different, and so what we learned in April 2020 is no longer the same environment even though it's still within the pandemic cycle." (P1217)

TABLE 2 (part 2 of 4).
IPAC challenges and strategies implemented

IPAC Challenges Experienced by LTCH/RH During the COVID-19 Pandemic (continued)		
Theme	*Description of Theme*	*Quote*
Resource shortages, including PPE and access to COVID-19 rapid tests.	Sites experienced shortages or poor access to PPE for staff members, making it difficult to follow IPAC protocols. This was particularly an issue during the first wave, where there were shortages on all PPE (which was resolved over time), but was also seen later in the pandemic during a shortage of N95 masks following guidance changes. Following recommendations to employ rapid COVID-19 testing during the Omicron wave, sites experienced challenges in acquiring sufficient rapid COVID-19 testing kits in a timely manner, resulting in shortages.	"When the pandemic hit, we were quite unprepared, they did not have any pandemic supplies. When we went into their pandemic room they saw that everything expires, we were short of PPE, they had staff shortages. It took us about 6 months to reach equilibrium. This is definitely resolved now, we have sufficient amount of supplies." (P1021) "The team is very good with wearing PPE; we're struggling right now with getting N95 or KN95, it's a huge struggle. So, we're worried about that right now." (P1215) "Access to rapid tests is difficult; supposed to arrive in 5 days but it takes 2 weeks." (P1213)
Lack of funding to cover costs related to N95 mask fit testing, staff training for IPAC protocols.	While some homes had enough funding or resources in-house to support IPAC (e.g., N95 mask fitting; IPAC protocol training), other homes did not have the necessary resources in-house nor sufficient funding to do so.	"To bring in the mask testing. We're behind on that because we hired a lot staff since she [mask fit tester] was in. When she was here we didn't have a lot of time but she's willing to work with each of the staff members so that she can properly show how to wear mask, why they wear a mask, when to change their masks. She's willing to do all of that with them but she was being paid by the hour. I only had so much money I could put towards that." (P1212) "For a home of my size, to get someone to come in is a couple thousand dollars. So it is privately paid and the other thing I do is I take on people that can't even afford. So affordability for those extra things is a challenge." (P1214)
Physical environment of homes not conducive to IPAC implementation.	Homes experienced challenges around finding physical space for IPAC supplies, disinfecting large areas, and ensuring physical distancing in an environment that was not built to handle such expectations (e.g., lack of space, small physical space).	"The physical layout of the building means it's not always easy for people to engage in social distance when having meals and such for break time for staff." (P1024) "One of the difficulties during outbreak is space. We are an older building where they were never meant to have a pandemic in. We lack division of units with fire doors. We had to change their sections to be able to make for a safer IPAC noted sections. We had to get creative with different spaces to store PPE." (P1008)
PPE fatigue.	Staff members and caregivers became tired of wearing PPE, due to discomfort that comes from wearing many layers of PPE consistently throughout their shift; this worsened in warmer weather. This led to PPE burnout and decreased compliance to PPE in many instances.	"If a unit goes on suspect outbreak it is difficult for staff – they need to wear PPE and change every time they go into a different room… but when they do audits they see that not all of them are complying – they will hear that they are tired with unit on suspect outbreak, they are tired – there is lots of PPE fatigue… Still not 100% compliant due to fatigue." (P1035) "Staff complained wearing mask and face shield, they do complain… You really cannot blame – it's been so long wearing it, the new rules came out that our screeners have to wear N95, full PPE and face shield… N95 there is no way you can make comfortable because it has to fit very tightly so nothing goes in… Staff are adhering to it but no one likes it." (P1031) "In the summertime – PPE fatigue is dependent on the weather. In the summertime, staff were really struggling. It was really hard for them to wear the full face shield and provide care to residents – you are really sweating under there. Especially in the shower. Now that is not a problem – if you are vaccinated you now do not need to wear the face shield (P1033).

TABLE 2 (part 3 of 4).
IPAC challenges and strategies implemented

IPAC Challenges Experienced by LTCH/RH During the COVID-19 Pandemic (continued)		
Theme	*Description of Theme*	*Quote*
Fears of returning to normal and loosening IPAC restrictions.	Some found adapting to the earlier stages of the pandemic easier because the focus was on constant change. Now some are finding it difficult to loosen IPAC restrictions, for fear of another outbreak. Some expressed a fear of "returning to normal".	"As this has worn off the other needs are ramping back up." (P1025) "You have demands for other things. I just feel like we have been hanging on for dear life for a year and a bit and now you're telling me to let go? It's hard to let so many people come in after we have been so cautious." (P1025) "There has been a disconnect to how tightly we have been holding on to things and now letting go." (P1025) "We have a fear of going back to normal; we have been very very careful and I think that's why we haven't had a second outbreak or have things like that because we're watching all the breaches that we can't control happening. We're at least being very safe in here." (P1206)
Supports and Strategies Implemented by LTCH and RH to Address IPAC Challenges		
Theme	*Description of Theme*	*Quote*
Having a dedicated IPAC manager/ nurse/champion.	IPAC representatives helped provide advice, answer questions, and supported each site and their staff to ensure IPAC protocols were properly followed.	"IPAC team – biggest support during the past year – with [hospital name]… they provided very good concrete advice – giving other pointers about this is what they do, this is what the suggestion is, acknowledging that people have lives outside of the RH and acknowledging this and the nervousness of how do you go home and protect your family." (P1207) "There has been some non-compliance with staff and visitors but we have recently implemented IPAC Staff Champions, so they give feedback to us as to who they identified as not following guidelines. So that is helpful. We try to educate the staff when we have our weekly meetings so we have someone show us how they would do their PPE, like donning and doffing, and educate them on the role of the IPAC Champion. So because they are really educating each other rather than us educating them it is like we have a team working alongside the management to ensure IPAC precautions are upheld." (P1217)
Consistent communication with public health units.	Some sites had regular communication with their local public health units that provided them with support, education, and information.	"They have regular calls (biweekly) with their local public health [unit] – has been a great forum to share and exchange ideas with other homes, ask questions when they are unclear, etc. – there has been so many changes almost daily – that platform has been really great." (P1211) "When there are cases related to IPAC (i.e., COVID cases) this is the only time they get in touch with [hospital] and [public health units]… they keep in consistent communication about any potential IPAC issues." (P1035)
External supports from hospitals or PHU (IPAC guidance, physical or financial resources).	Sites received a range of support/ resources from local public health agencies and external organizations/ hospitals. There was also financial support (e.g., from provincial government) to RH to purchase PPE and cleaning supplies, and hire emergency services to provide onsite support.	"The support from the province, I think it comes from the top, we were given funding to acquire PPE and the cleaning stuff so that helped the staff to be comfortable and also the residents." (P1214) "During first outbreak they got support from [local health integrated network] LHIN – got redeployed nurses to support them, they also got deployed some staff from [hospital name]." (P1012)

TABLE 2 (part 4 of 4).
IPAC challenges and strategies implemented

Supports and Strategies Implemented by LTCH and RH to Address IPAC Challenges (continued)		
Theme	*Description of Theme*	*Quote*
Use of multi-pronged strategies to disseminate IPAC updates to staff.	Sites utilized a variety of strategies to disseminate IPAC information and updates to their staff, tailoring formats or leveraging communication strategies they already had in place. Strategies included huddles, town halls, emails, calls, handouts, bulletins, in combination with innovative, interactive, and informal approaches to sharing information.	"We send weekly reminders to staff, through school messengers and emails. We talk about PPE and things to stay on top of. A lot of signage in the building too. And in the outbreak we were doing almost daily announcements. Daily through the phone system, through the email system. And daily things like reminders and tips to do… we also did IPAC huddles, so safety concerns, at the beginning of the shift, what are the challenges, what's not working? Ok let's go fix that for you." (P1020) "Small group in service or team huddles where there's a lot of interaction… I try to run my programs where people can contribute their experiences and its very informal… I think the staff respond well to the interactive aspect." (P1029)
Monitoring and audits on IPAC compliance.	Sites monitored and conducted audits to ensure staff, caregivers, and visitors comply with IPAC protocols.	"We've done a lot of audits, we have external parties coming in for assessment, we follow the IPAC checklist." (P1023) "What they've been doing on PPE is daily manager walkabouts – daily the managers would go around witnessing staff doing IPAC protocols and would correct them on the spot." (P1013)
Having leaders who are committed to transparency with staff, families/ caregivers.	Commitment to communication from leadership, and transparent, ongoing communication among staff, and between staff and caregivers/ families were effective; included open dialogue on challenges around adherence to IPAC guidelines. This fostered trust.	"During height of COVID, this was [on a] daily basis… I go everyday on each floor throughout the shifts, the staff are always calling me asking me questions, the communication channel is always open to anyone we are already available 24/7 we are always available to our staff. For family members I will email them or phone them to inform them, what's new what changes are coming." (P1031)
Homes with physical space conducive to IPAC measure implementation.	Having a larger sized home facilitated following IPAC protocols on physical distancing and social isolation. Sites also leveraged other techniques, including restricting movement through cohorting.	"This is due to the mere size of the home and the number of people coming in. Being such a large home allowed them to physically distance in a way that is able to help them with their IPAC practices." (P1033) "When we were on outbreak each floor had a designated break room so we were cohorting staff to the floors." (P1009) "Our homes were certainly one of the lucky ones where we had space so we could change one of the rooms for visiting, other homes are right in the middle of the city that have no real estate so our community has been wonderful. We've been grateful for that." (P1206)
Having leaders with experience navigating public health emergencies.	Sites with staff who either worked through previous pandemics or earlier COVID-19 waves, were able to help sites navigate the pandemic and associated outbreaks.	"One benefit was our [director of care] DOC... before. She had experienced SARS so she implemented a lot of things she had experienced from SARS at the home. Having that veteran, who know what to implement quickly, helped us feel safe and more prepared in the middle of a lot of people around us not knowing what to do. That was a big factor in our success." (P1020) "Because of their experiences then during the first wave, they were able to build the IPAC program to how it is now. That's how they came to creating the IPAC role, they realized they need one person to manage this. They are still in and out of outbreak but with this role in place (IPAC person) they are able to manage it better in the third wave now compared to before." (P1012)

were challenged to advocate and secure doses for their staff members. Government-wide mandatory vaccination policies were perceived both as a barrier to uptake (some viewed it as an infringement on personal liberties) and a facilitator to uptake (led the majority of LTCH/RH residents and staff to receive the first two doses), though uptake of subsequent COVID-19 boosters remained a persistent challenge. Doubts about COVID-19 booster necessity was driven by beliefs that people had COVID-19 antibodies from their initial doses or from natural illness, and because COVID-19 case numbers were increasing despite high vaccination rates.

Enablers to vaccine uptake were also identified. Some staff believed that vaccine uptake (particularly the initial two doses) would facilitate a return to normalcy, for instance, by ending lockdowns and allowing staff to return to work in more than one home. Others became discouraged when public health mandates remained unchanged (e.g., lockdowns) and COVID-19 cases continued following uptake of COVID-19 vaccines.

TABLE 3 (part 1 of 3).
COVID-19 vaccine challenges

COVID-19 Vaccine Challenges Experienced by LTCH/RH During the COVID-19 Pandemic		
Theme	*Description of Theme*	*Quote*
Lack of vaccine availability.	Homes experienced challenges with COVID-19 vaccine availability due to interim supply chain issues (i.e., Canada-wide 2nd dose delays) – this delayed vaccination of their staff.	"All set to roll something out in February, then the vaccine supply dried up; biggest challenge right now is not being able to run a few vaccine clinics maybe a week apart (from each other), potentially get our vaccination rate up for first dose for staff; it's hard to promotion and whip up enthusiasm and then not being able to produce the vaccine." (P1013) "There is a back order on vaccine, I think it's everywhere right now. The day before yesterday I received the vaccine order that I ordered two weeks ago. If I had more vials right now I would give more because lots of staff are writing up, giving their name everyday asking for it." (P1031)
Mistrust around vaccine safety.	There was mistrust from staff, caregivers, and residents around vaccine safety due to the following reasons: Rapid vaccine approval timelines Changes in vaccine schedule Fears about long-term effects and vaccine safety and particularly around fertility, breastfeeding, and pregnancy Members of marginalized communities also experienced mistrust rooted in systemic and historical mistreatment by government and health institutions.	"… their biggest complaint is, [the studies on vaccines] it's on a piece of paper. It looks like someone typed it on word, so how do they know the logistics? Case studies? They want more credible info on these vaccines. I myself wanted that as well. So those kinds of resources, with the backing of how the study was done, how vaccine was created, would definitely help percentages go up." (P1022) "Some don't know the long term effects of it and that's the problem. It's just the unknown… And over the internet they read certain things like a year or in two years we're all going to die from it. And I think they're talking about the booster, and the issues with AstraZeneca and before you couldn't mix them and now you can. And if you took the AstraZeneca you can't travel. And the Johnson and Johnson that was bad thing too. Adding to the unsureness." (P1027) "Some females think it might affect their reproductive system and they don't want to get vaccinated… some young women are thinking of getting pregnant in the future and it's a lot of the unknown." (P1027) "Staff population is largely Black community, they have a lot hesitancy around previous vaccinations. Black people have been used as guinea pigs in the past for vaccines; there was a cultural vaccine hesitancy, they have a very diverse staff so certain cultural groups were very hesitant." (P1013)
Belief that the vaccine, particularly boosters, will not improve or impact health outcomes.	Some staff did not believe the impact would improve health outcomes; this sentiment was further driven by positive COVID-19 cases and continued COVID-19 restrictions after vaccination.	"Some think they got COVID already so they are already immune and don't need vaccine." (P1012) "They just started doing 3 doses for residents. This has surprisingly been a challenge – people got 2 but they feel like why should I be getting another 1. Shouldn't I have antibodies?" (P1033)

TABLE 3 (part 2 of 3).
COVID-19 vaccine challenges

COVID-19 Vaccine Challenges Experienced by LTCH/RH During the COVID-19 Pandemic (continued)		
Theme	*Description of Theme*	*Quote*
Lack of knowledge, access or ability to get to a vaccine clinic.	Staff at sites experienced challenges with accessing vaccine clinics, some of which were due to the following: Lack of transportation to the vaccine clinic Inability to find local vaccine clinics No protected time to travel to a vaccine clinic (staff would rather wait till the vaccines are available at the site) Inability to book an appointment following the new online vaccine clinic booking system; compounded with long waitlist time.	"It is so difficult to find a place to get vaccinations though… I was saying how I am encouraging my staff to get vaccinated but am having trouble finding a place." (P1214) "… I got an email they're opening a clinic at 3 locations… But most of my team are like we can't even get through. And the appointments they did have booked, some of them had appointments booked in March, so in order to try to book an appointment through this portal, then they had to cancel their other appointment so now they lost their other appointment. So it's not set up really well… We've been very fortunate here because they're [staff] like "yeah I want to get it." It's just a matter of being able to get it." (P1215) "Some of them [staff], I can't say how many, but definitely transportation is a barrier for staff. Another barrier is time, people wanting to wait until it's available in the home but it's not even on the horizon yet." (P1015)
Families' concerns about vaccine safety impact vaccine uptake among residents who do not have capacity to provide consent.	Families who did not want to get vaccinated prevented their loved ones from receiving the vaccines.	"Some family that chose not to get the vaccine won't let their loved ones in residence get it either; the ones that have chosen not to get it they are pretty adamant on their decision and not letting their loved ones get it." (P1012)
Beliefs that vaccine mandates are an infringement on labour laws, personal liberties.	Sites experienced staff pushing back against vaccine mandates, voicing their concerns that it was against their rights and that they were being forced by their organization to get the vaccine.	"Now province is putting in mandate that by Sept 30 everyone needs to have first dose – getting feedback that it is against their rights, they need exception for X reason (e.g., religious beliefs) – this is the biggest challenge." (P1033) "A big change is, now they say, if you want to travel, vacation, you have to get it. It makes people unfortunately feel that they have no choice." (P1020)
Supports and Strategies Implemented by LTCH and RH to address COVID-19 Vaccine Challenges		
Theme	*Description of theme*	*Quote*
Individual-level strategies to promote vaccine confidence.	Sites had success with targeting each staff member at an individual-level and engaging leadership to educate staff on the vaccine, promote uptake, and provide them with access to evidence-based information.	"Our medical director is always available if any staff have any questions about the vaccines, so the staff can set up an appointment to meet with them any time." (P1031) "And if there was someone who was hesitant, we would address it 1:1, and if it escalated then the manager would talk with the individual saying, "it is all good, here's all the research on it", and if it didn't work then the owner/operator would step in and by then almost all the staff got it. We had a few that lingered because they wanted to talk with their doctors, but we were able to debunk myths and I think taking that management strategy had a big impact." (P1217) "They finally have a vaccine clinic on site for residents; once they had a clinic on site with people they knew (e.g., medical director to speak with staff), that helped with vaccine hesitancy because people they are familiar with." (P1013)

TABLE 3 (part 3 of 3).
COVID-19 vaccine challenges

Supports and Strategies Implemented by LTCH and RH to address COVID-19 Vaccine Challenges (continued)		
Theme	*Description of Theme*	*Quote*
Organizational level strategies to promote vaccine confidence.	Sites also ensured that staff were provided with evidence-based information and education about the vaccine to combat misinformation, including information to explain the rapid approval process. Sites found that informational town halls were an effective strategy for increasing vaccine uptake. Sites utilized opinion leaders and vaccine champions to promote vaccine uptake. Strategies ranged from bringing in staff to speak to historically marginalized populations, having management being the first to get vaccinated, holding vaccine campaigns with champions, and bringing in team members who were negatively impacted by COVID-19 to speak about their experiences.	"During the early stage of vaccination, staff were having concerns about side effects – they were able to provide education about the vaccines, were able to create a pamphlet with FAQs, ingredients, safety for pregnancy and age." (P1035) "… we had management rolling up their sleeves and saying, "I am doing it, I rolled up my sleeves". We had our DOC go first, the hospital affiliated with us at the time sent busses, and with each bus 1 manager went and got the vaccine." (P1217) "IPAC lead, from Jamaica from [hospital name] – she had gone around to various cultural groups and speak to them which has helped for vaccine hesitancy." (P1013)
Incentives to support vaccine uptake.	Some sites provided resources to staff to be vaccinated. This included paying transportation and parking fees for staff as an incentive.	"Some of them, I can't say how many, but definitely transportation is a barrier for staff. So we've reached out to some and say we are willing to pay taxi and uber, and we have one more staff sign up because of that." (P1015) "We paid staff to go, even for transportation and parking, if they went to get vaccinated at the hospital site. That was encouragement for them to go, doing it outside of working hours, for them to go." (P1023) "And we also would pay our staff for 3 hours of work if they chose to get vaccinated on their own time, so that was an incentive." (P1217)
Improving ease of access to vaccinations for LTCH/RH populations.	Sites' connection to IPAC supports including IPAC hubs facilitated access to vaccine supply and appointments. Sites were also able to overcome logistical barriers to vaccine access by supporting staff with appointment booking or by leveraging mobile clinics/on-site clinics; this likewise included offering vaccines to caregivers while they were onsite visiting residents to facilitate/ encourage uptake.	"There are some people she was able to assist with making the appointment for them on her computer because don't know if technology is a barrier. Got about 4/5 people to get the vaccine from doing that." (P1008) "They finally have a vaccine clinic on site for residents; once they had a clinic on site with people they knew (e.g. medical director to speak with staff), that helped with vaccine hesitancy because people they are familiar with – this Friday through [Public Health Unit], we've been given the opportunity to vaccinate with Pfizer on-site; a few staff members put together this vaccine clinic; now there is a growing list of people waiting to get vaccinated." (P1013) "The staff give priority to the essential care givers for vaccine – since most of the residents are in the 90s and their children are in the 70s, they are at higher risk; they had a mobile clinic come to the home – 100% residents are vaccinated." (P1201)

In other homes, outbreaks drove staff, who were initially hesitant, to receive the vaccines. Participants reported the use of multi-pronged strategies to address vaccine misinformation and concerns, including one-to-one conversations with staff, engaging leadership to provide education about the vaccines, distribution of educational materials to address key concerns, and holding town halls with respected experts. Use of opinion leaders and respected vaccine champions were also found to be effective strategies to combat vaccine hesitancy, particularly when champions included members of historically marginalized populations and reflected the demographics of the LTCH/RH staff population. LTCH/RH policies such as

provision of financial resources (e.g., transportation, parking coverage) and providing incentives to vaccination were perceived as effective strategies. Finally, homes used connections to IPAC supports, including IPAC hubs that included regional hospitals, to facilitate access to vaccine supply and appointments, particularly at the start of the vaccine rollout. Some sites overcame logistical barriers to vaccine access by supporting online appointment booking or hosting mobile or on-site vaccine clinics. Some homes also offered boosters to caregivers while they were visiting residents.

Staff Well-Being

LTCH/RH leaders reported that frontline staff such as PSWs and nurses experienced a variety of challenges to well-being during the pandemic, and described significant experiences of burnout, low morale, and mental health challenges (Table 4). These were driven by working in a high-stress, high-risk environment, coupled with challenges outside of the workplace such as fear of transmitting COVID-19 to their families, colleagues and residents, childcare challenges, fears about vaccine safety, and general fears about the novel virus and its impacts (including health and economic impacts). Provincial policies aiming to curb COVID-19 spread prevented staff from working in more than one home, which led to staff shortages and increased burden on existing staff. Policies on social distancing prevented the implementation of social and activities programming for residents and increased resident isolation, which led to decreased social interaction and subsequent declines in residents' physical and mental health. Participants reported that they and their staff felt helpless to address these concerns and were unable to support their residents' needs.

Staff also became sick with COVID-19, saw colleagues and family members become sick with COVID-19, and witnessed the death of residents. As the pandemic continued, staff were expected to maintain high rates of compliance with IPAC protocols, including wearing masks when most of the province had lifted masking requirements. This led some staff to experience IPAC and PPE fatigue, which was compounded by emotional and physical burnout. Some staff refused to work with residents who had COVID-19, and others left their positions or chose to retire early due to burnout and feelings of 'moral injury' (i.e., feeling unable to care for residents in an optimal way while feeling unsupported by leadership). In turn, these challenges increased staffing shortages and pressures on remaining staff. For instance, role shifting was prevalent, with many frontline staff (and sometimes managers) taking on responsibilities outside of their traditional tasks (e.g., personal support workers implemented IPAC protocols, nurses became IPAC practitioners, and managers supported resident care), while many staff worked longer hours or double shifts to meet home and resident needs. When homes used agencies to address staff shortages, regular staff members worked alongside people they did not know or trust, which sometimes led to increased stress, workplace conflict, and reduced staff morale and team cohesion.

LTCH/RH leadership also faced a number of unique challenges. In addition to trying to maintain home functioning and staff morale, leaders were required to participate in daily or weekly calls with external organizations such as public health units or hospital IPAC hubs. System inefficiencies also challenged home leaders; for instance, some participants reported being forced to individually source PPE amidst the country-wide shortages. One participant reported having to source equipment from three medical providers, as the government had not yet developed its centralized system. Leaders also struggled to stay up to date on continually changing COVID-19 mandates, policies and guidance, and found it challenging to address questions about the nature of the virus or, as the pandemic evolved, COVID-19 vaccines. Participants also reported high levels of distrust directed towards them from by staff and by residents' family members who were frustrated by IPAC protocols and lockdowns which limited or eliminated visits to loved ones.

Leaders reported feeling insufficiently equipped to provide resources to staff to address these challenges. At the height of the pandemic, they prioritized implementation of IPAC protocols and resident care, which left little capacity to develop and implement wellness programs to support staff. Some did report the implementation of well-being activities in the workplace; however, they were also reports of discontinuation of these activities due to a lack of capacity or funding to sustain them. Other participants implemented and encouraged mental health supports such as employee assistance programs, but noted little uptake among staff due to accessibility challenges and stigma associated with seeking these supports. Implementation of such strategies seemed largely dependent on leadership commitment to addressing staff well-being challenges (see Table 4). Some leaders used a co-development approach to develop and implement these strategies, such as the formation of a wellness committee or providing opportunities for leadership to listen to staff concerns.

DISCUSSION

The impact of COVID-19 on long-term care and retirement homes was devastating and received global attention and calls for immediate supports to maintain resident and staff safety.[22] Nearly one year into the pandemic, we conducted 91 key informant interviews with LTCH and RH leadership in 47 homes to assess their experiences navigating the pandemic, and to define ongoing challenges. Participants identified challenges associated with IPAC implementation, COVID-19 vaccine uptake, and staff well-being and mental health. At the onset of the pandemic, challenges were primary related to IPAC, including PPE shortages (e.g., masks, face shields) and difficulties implementing IPAC protocols. Many of these challenges were highlighted as significant concerns for congregate homes for decades.[10,11,23] The pandemic exposed these vulnerabilities and created a crisis, leaving governments rushing to fill the gaps and provide supports. Despite these efforts, our study shows that IPAC implementation concerns continued to persist up to one year into the pandemic. Other contextual challenges unique to COVID-19 included supply

TABLE 4.
Well-being challenges and implemented strategies

Well-being Challenges Experienced by LTCH/RH During the COVID-19 Pandemic		
Theme	*Description of Theme*	*Quote*
LTCH staff experienced burnout, moral injury, PTSD, stress, health challenges and general lack of well-being and morale during the pandemic.	The pandemic negatively impacted the mental health of staff. Challenges to well-being included working long hours (consistent overtime, no vacation), inability to care for residents in the way they wanted to due to IPAC requirements and staff shortages, working alongside agency staff who were unknown to home staff [and unfamiliar with the home/residents], high levels of stress and always being on alert, fear of bringing COVID-19 to the home, and witnessing the deaths of residents.	"Our staff are tired, burnt out, it's just wellness and supporting them, they've been through a lot, as I said with our clientele, a lot of people don't have families so we become their family. I think staff might be burnt out." (P1009) "Staff are concerned that they are continuing to have outbreaks; concerned about themselves and their families; one of the big things is mental health, a lot of staff are extremely stressed and burned out; a lot of them were here from the beginning and watching the residents die and coworkers get sick; even though it's better than last year it's still hard." (P1012)
Staff generally reported a lack of access to appropriate mental health and well-being supports in homes.	Many homes did not have appropriate mental health supports available. As the pandemic progressed, some supports that were initially put in place were discontinued due to limited resources.	"Supporting staff wellness – there's not a lot that we do right now, we have paid sick days for staff, but in terms of more proactive things that are tools for personal mental health and wellness we don't do a lot." (P1029) "Morale is low with the staff – before (early 2021) management was providing free meals, snacks for the staff during COVID – it was taken away during the 2nd wave – staff are not really getting any incentives. No EAP [Employee Assistance Program] for staff as well." (P1035) "Right now all the programs are limited, how do we make sure that people still have their social needs met when its limited – they don't have the human resources to support every resident and staff with their needs." (P1201)
When available, staff did not access EAP and other well-being resources; stigma was perceived as a factor.	In situations where well-being resources and supports existed, there remained a lack of uptake. Staff did not have capacity to engage with them, and/or had concerns about stigma and privacy.	"There is still stigma around mental health and don't want people to think they are crazy if they reach out to help; they are reluctant because they feel like there is a judging factor; they might not want to share which RH they came from but it's just about knowing that there's other people that went through the same circumstances." (P1209)
Supports and Strategies to Address Wellness Challenges		
Theme	*Description of Theme*	*Quote*
Some home leaders implemented a variety of strategies to address well-being.	To support staff and resident wellness, sites implemented diverse strategies, which included: Providing behavioural supports for residents through Behavioural Supports Ontario (BSO) Limiting number of staff shifts and encouraging use of vacation time Leveraging support from external organizations to promote staff wellness (e.g., wellness resources from Local Health Integration Networks (LHIN) and regional hospital networks; drop in counselors or psychogeriatric nurses) Having clinical staff on site with expertise in promoting wellness (e.g., social worker, occupational health) Offering Employee Assistance Programs Hosting social activities and staff appreciation events, providing gift certificates Distributing well-being resources (e.g., bulletins, self-serve resource table)	"Yes, got a BSO social worker to stay in home. Social worker. Goes above and beyond and is really their go to. Helps with rec – fun activities and ideas. She helps with everything." (P1006) "They are so dedicated to make sure they are taking care of their residents and staff, this year we have started the vacation planning early in the year and made it clear to them to do whatever they can to make sure they have their time off; this has been helpful in making sure they don't have burnout and ensuring time off." (P1021) "We have a team that they can call anytime, [name of team], and there are counsellors that can help them through." (P1209) "One of our managers is implementing a wellness program in our home that's just focused on wellness among staff. Currently only have a "wellness committee" being created, to encourage other staff from other departments to participate in it. That's also a work in progress; it's not just nursing staff, they want PSWs, dietary aids, physio aides, etc. They're creating posters, etc. to get them to join in." (P1009)

chain shortages,[24,25] which limited access not only to PPE, but also to COVID-19 PCR testing (when rapid antigen tests had not yet become widely available).[26]

As PPE supplies became more available and IPAC protocols became more routine with the support of LTCH/RH leadership, hospital, and public health units, other IPAC challenges emerged including PPE fatigue and challenges to maintain stringent IPAC protocols while the rest of the province loosened restrictions. It was in this setting that COVID-19 vaccines entered our health system. In December 2020, home leaders advocated for early access for their residents and staff. While this prioritization was granted to LTCH, this was not the case for RH, creating equity imbalances.[11,26,27,28] Furthermore, home leaders contended with staff and family fears about vaccine safety and efficacy; these concerns further escalated with the Ontario government's introduction of mandatory vaccination policies in the spring of 2021, which were seen by our participants as both a barrier and facilitator to vaccine uptake.[29]

Frequent changes to IPAC and vaccination policies posed further challenges. In both Canada and the United States, these included conflicting information about the safety of mixing vaccines, the safety of the AstraZeneca vaccine, vaccine schedules, and the speed at which vaccines were approved.[30,31] The absence of clear rationales and mixed messaging created confusion and eroded trust among staff and families, fostering fear, anger, and resistance to policies like vaccine mandates, family visitation, and masking.[27] These policies reinforced doubts about the vaccines and fueled mistrust of health organizations, especially among historically marginalized communities.[30] This context added significant strain on home leaders, who did not feel well-equipped or supported to navigate access, uptake, and morale challenges.[32,33]

Thus, it was not surprising that staff mental health and well-being challenges were identified as a strong theme across our interviews. Yet, unlike IPAC or vaccine challenges, there were few supports and limited capacity to address these challenges. Staff experienced stress, PTSD, and burnout.[34] While other health-care workers were being hailed as heroes, LTCH/RH staff, particularly staff in unregulated roles, such as Personal Support Workers, remained underpaid, underappreciated, and under-supported.[27,34-38] Mandates such as the 'one-home policy' requiring staff to only work in one home, coupled with province-wide shutdowns, directly impacted staff incomes and amplified needs for basic services such as childcare support and transportation.[39] Such challenges directly impacted well-being and mental health, and compounded the issues staff faced at work including ability to implement IPAC and vaccine programs. Racialized staff (estimated at >40% of the Ontario personal support worker workforce) also experienced intersecting challenges related to racism and workplace violence.[13,40,41] In our study, we identified few homes with robust employee support programs or supports; those that did have services available reported low uptake by staff due to lack of capacity to engage, lack of awareness, or concerns about stigma associated with seeking mental health supports.

Participants described a plethora of strategies that were used to mitigate these challenges. Leaders also described the benefits of the hub-and-spoke care delivery model.[42] which was implemented to allow hospitals to 'partner' with LTCH and provide supports; notably, these integrations were largely absent pre-pandemic.[10,11] Having effective leadership that was empathetic, collaborative, and engaged was consistently cited as a facilitator to combatting challenges related to IPAC, vaccines, and well-being. Despite the implementation of various strategies to address staff well-being, these were often deemed insufficient in the absence of government-wide policies such as paid sick leave for COVID-19 testing, vaccinations,[43] or illness and financial benefits.[44]

The COVID-19 pandemic put a spotlight on long-standing inequities and systems gaps for the LTCH and RH sectors and their workers.[10] Our findings are consistent with the well-documented challenges in LTCH and RH and other research conducted at this time in Canada and internationally.[11,45,46] However, our data also show that the systemic challenges reported by other researchers earlier in the pandemic continued to persist well through 2021 and 2022 despite massive media and government attention and efforts to address these challenges.[10,46,47] Our findings also show that, while challenges evolved during the pandemic, the available supports did not adapt accordingly.

Limitations

Our study has limitations. It was limited to homes in Ontario, Canada, and mostly included homes located in the GTA.[48] We interviewed LTCH and RH leadership; however, the perspectives of LTCH and RH residents, caregivers, and staff are important voices missing from our assessment. Finally, we conducted these interviews over a 17-month period between February 2021 and July 2022. Thus, reported challenges facing homes in the early waves of the pandemic (March 2020– February 2021) may have been subject to a recall bias, though we anticipate the impact of this bias is limited, given consistency of our findings with other research reported during this time.[49]

CONCLUSION

LTCH and RH experienced significant challenges during the pandemic related to IPAC implementation, uptake of COVID-19 vaccines, and staff well-being and mental health. A plethora of strategies were used to address these challenges, yet over a year into the pandemic, significant gaps remained. These findings demonstrate the need for multi-level strategies to support LTCH and RH to prepare for and navigate future public health crises.

ACKNOWLEDGEMENTS

The authors wish to thank Chelsea Gao, Oswa Shafei, and Jane Dim for their contributions to data collection.

CONFLICT OF INTEREST DISCLOSURES

We have read and understood the *Canadian Geriatrics Journal*'s policy on conflicts of interest disclosure and declare that we have none.

FUNDING

This work was supported by the COVID-19 Immunity Task Force under Grant #2021-HQ-000143 and the John and Myrna Daniels Charitable Foundation via the University of Toronto.

REFERENCES

1. Canadian Institute for Health Information. Long-term care homes in Canada: How many and who owns them? 2021 Jun 10. Accessed July 9, 2024. Available from: https://www.cihi.ca/en/long-term-care-homes-in-canada-how-many-and-who-owns-them
2. Ministry of Long-term Care. Long-term care in Ontario. 2021 Dec 20. Accessed July 9, 2024. Available from: http://www.ontario.ca/page/long-term-care-ontario
3. Retirement Homes Regulatory Authority [website]. Accessed July 9, 2024. https://www.rhra.ca/en/
4. Retirement Homes Regulatory Authority. RHRA COVID-19 dashboard. 2020 Apr 3. Accessed July 10, 2024. Available from: https://www.rhra.ca/en/covid19dashboard/
5. Canadian Institute for Health Information. Long-term care and COVID-19: the first 6 months. 2021 Mar 30. Accessed July 10, 2024. Available from: https://www.cihi.ca/en/long-term-care-and-covid-19-the-first-6-months
6. Stall NM, Brown KA, Maltsev A, Jones A, Costa AP, Allen V, *et al*. Covid-19 and Ontario's long-term care homes. Ontario COVID-19 Science Advisory Table; 2021 Jan 20.
7. Canadian Institute for Health Information. COVID-19's impact on long-term care. 2021 Dec 9. Accessed July 10, 2024. Available from: https://www.cihi.ca/en/covid-19-resources/impact-of-covid-19-on-canadas-health-care-systems/long-term-care
8. Canadian Institute for Health Information. Pandemic experience in the long-term care sector: how does Canada compare with other countries? 2020 Jun. Accessed July 10, 2024. Available from: https://www.cihi.ca/sites/default/files/document/covid-19-rapid-response-long-term-care-snapshot-en.pdf
9. Clarke J. Impacts of the COVID-19 pandemic in nursing and residential care facilities in Canada. 2021 Jun 10. Accessed July 10, 2024. Available from https://www150.statcan.gc.ca/n1/pub/45-28-0001/2021001/article/00025-eng.htm
10. Estabrooks CA, Straus S, Flood, CM, Keefe J, Armstrong P, Donner G, *et al*. Restoring trust: COVID-19 and the future of long-term care [RSC Policy Briefing]. Royal Society of Canada. 2020 Jun.
11. Estabrooks CA, Ewa V, Keefe J, Straus SE. The predictable crisis of covid-19 in Canada's long term care homes. *BMJ*. 2023 Jul 24;382: e075148.
12. Liu M, Maxwell CJ, Armstrong P, Schwandt M, Moser A, McGregor MJ, *et al*. COVID-19 in long-term care homes in Ontario and British Columbia. *CMAJ*. 2020 Nov 23;192(47): E1540–E1546.
13. Ontario Ministry of Long-Term Care. Infection Prevention and Control Standard (IPAC) for long-term care homes. 2022 Apr. Accessed July 10, 2024. Available from: https://ltchomes.net/LTCHPORTAL/Content/12.%20IPAC%20Standard%20-%20EN.pdf
14. Government of Canada. COVID-19 epidemiology update: summary. Accessed July 10, 2024. Available from: https://health-infobase.canada.ca/src/data/covidLive/Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf
15. Gale NK, Heath G, Cameron E, Rashid S, Redwood S. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol*. 2013 Sep 18; 13(1):117.
16. Johnson GA, Vindrola-Padros C. Rapid qualitative research methods during complex health emergencies: a systematic review of the literature. *Soc Sci Med*. 2017 Sep 1;189:63–75.
17. Statics Canada. Focus on Geography Series, 2021 Census of Population: Toronto, census metropolitan area. Accessed July 10, 2024. https://www12.statcan.gc.ca/census-recensement/2021/as-sa/fogs-spg/page.cfm?lang=E&topic=1&dguid=2021S0503535
18. Xia Y, Ma H, Moloney G, García HA, Sirski M, Janjua NZ, *et al*. Geographic concentration of SARS-CoV-2 cases by social determinants of health in metropolitan areas in Canada: a cross-sectional study. *CMAJ*. 2022 Feb 14;194(6): E195–E204.
19. Nadesan P. Exploring the differential impact of covid-19 on the greater Toronto area: a literature review. *McMaster Un J Pub Health*. 2022 Dec 1;1(1).
20. Canadian Institutes of Health Research. Guide to knowledge translation planning at CIHR: integrated and end-of-grant approaches. 2015 Mar 19. Accessed July 10, 2024. Available from: https://cihr-irsc.gc.ca/e/45321.html#a3
21. Nevedal AL, Reardon CM, Opra Widerquist MA, Jackson GL, Cutrona SL, White BS, *et al.* Rapid versus traditional qualitative analysis using the Consolidated Framework for Implementation Research (CFIR). *Implement Sci*. 2021 Jul 2;16(1):67.
22. Ma H, Yiu KCY, Baral SD, Fahim C, Moloney G, Darvin D, *et al*. Covid-19 cases among congregate care facility staff by neighborhood of residence and social and structural determinants: observational study. *JMIR Public Health Surveill*. 2022 Oct 4;8(10): e34927.
23. Rochon PA, Li JM, Johnstone J, Brown KA, Armstrong P, Tanuseputro P, *et al*. The Covid-19 pandemic's impact on long-term care homes: five lessons learned. Ontario COVID-19 Science Advisory Table; 2022 Apr 28.
24. Canadian Foundation for Healthcare Improvement. Reimagining care for older adults: next steps in COVID-19 response in long-term care and retirement homes. 2020 Jul. Accessed July 10, 2024. Available from: https://www.healthcareexcellence.ca/media/pyeh54rn/2022_reimaginingcareforolderadults_whatweheard_en-final-ua.pdf
25. Houston AR, Liu J, Habibi R, Murphy S, Pai M. Canada's role in covid-19 global vaccine equity failures. *BMJ*. 2023 Jul 24; 382: e075149.
26. Sinha S, Feil C, Iciaszcyk N. The rollout of COVID-19 vaccines in Canadian long-term care homes, 9th April update. International Long-Term Care Policy Network. 2021 PR 12. https://ltccovid.org/2021/04/12/the-rollout-of-covid-19-vaccines-in-canadian-long-term-care-homes-9th-april-update/
27. Mishra S, Walker JD, Wilhelm L, Larivière V, Bubela T, Straus SE. Use and misuse of research: Canada's response to COVID-19 and its health inequalities. *BMJ*. 2023 Jul 24;382:e075666.
28. Clark J, Straus SE, Houston A, Abbasi K. The world expected more of Canada [editorial]. *BMJ*. 2023;382:1634.

29. Ontario Newsroom. News Release. Ontario mandates immunization policies for long-term care homes. Policies will focus on educating staff and monitoring staff immunization rates. 2021 May 31. Accessed July 10, 2024. Available from: https://news.ontario.ca/en/release/1000230/ontario-mandates-immunization-policies-for-long-term-care-homes
30. Theivendrampillai S, Cooper J, Lee T, Lau MW, Marquez C, Straus SE, *et al*. Canadian public perceptions and experiences with information during the COVID-19 pandemic: strategies to optimize future risk communications. *BMC Public Health*. 2023 Apr 28;23(1):796.
31. Harrison J, Berry S, Mor V, Gifford D. "Somebody like me": understanding covid-19 vaccine hesitancy among staff in skilled nursing facilities. *J Am Med Dir Assoc*. 2021 Jun 1; 22(6):1133–37.
32. Vernon-Wilson E, Tetui M, Nanyonjo A, Adil M, Bala A, Nelson D, *et al*. Unintended consequences of communicating rapid COVID-19 vaccine policy changes—a qualitative study of health policy communication in Ontario, Canada. *BMC Public Health*. 2023 May 23;231:932.
33. Lowe M, Harmon SHE, Kholina K, Parker R, Grham JE. Public health communication in Canada during the COVID-19 pandemic. *Can J Public Health*. 2022 Dec; 113(Suppl 1):34–45.
34. Fisher E, Cárdenas L, Kieffer E, Larson E. Reflections from the "Forgotten Front Line": a qualitative study of factors affecting wellbeing among long-term care workers in New York City during the COVID-19 pandemic. *Geriatr Nurs*. 2021 Nov 1; 42(6):1408–14.
35. Reynolds KA, Pankratz L, Jain B, Grocott B, Bonin L, King G, *et al*. Moral injury among frontline long-term care staff and management during the covid-19 pandemic. *FrontHealth Serv*. 2022 May 11;2:841244.
36. Sultana A, Ravanera C. A feminist economic recovery plan for canada: making the economy work for everyone. The Institute for Gender and the Economy (GATE) and YWCA Canada. 2020. https://static1.squarespace.com/static/5f0cd2090f50a31a91b37ff7/t/5f205a15b1b7191d12282bf5/1595955746613/
37. Sathiyamoorthy T. Supporting support workers: PSWs need increased protections during COVID-19. 2020 May 7. Accessed July 10, 2024. Available from: https://www.wellesleyinstitute.com/work-health/supporting-support-workers-psws-need-increased-protections-during-covid-19/
38. Hapsari AP, Ho JW, Meaney C, Avery L, Hassen N, Jetha A, *et al*. The working conditions for personal support workers in the Greater Toronto Area during the COVID-19 pandemic: a mixed-methods study. *Can J Public Health*. 2022 Dec;113(6): 817–33.
39. Reopening Ontario (A Flexible Response to COVID-19) Act. 2020, S.O. 2020, c. 17. O. Reg. 146/20: Limiting Work to A Single Long-Term Care Home. https://www.ontario.ca/laws/regulation/200146
40. Sethi B. Personal support workers are the backbone of health care but the bottom of the power structure. 2020 Sep 2. Accessed July 10, 2024. Available from: https://theconversation.com/personal-support-workers-are-the-backbone-of-health-care-but-the-bottom-of-the-power-structure-144648
41. Ejaz FK, Rentsch JH, Noelker LS, Castora-Binkley M. Racism reported by direct care workers in long-term care settings. *Race Soc Probl*. 2011 Jul;3(2):92–98.
42. Government of Canada. Integration of hospital with congregate care homes in response to COVID-19. 2023 Feb/Mar. Accessed July 10, 2024. Available from: https://www.canada.ca/en/public-health/services/reports-publications/canada-communicable-disease-report-ccdr/monthly-issue/2023-49/issue-2-3-february-march-2023/integration-hopital-etablissements-reponse-pandemie-covid-19.html
43. Ontario Ministry of Labour, Immigration, Training, and Skills Development. Ontario COVID-19 worker income protection benefit. 2021 Apr 29. Accessed July 10, 2024. Available from: https://www.ontario.ca/page/covid-19-worker-income-protection-benefit
44. Government of Canada. COVID-19 benefits from the CRA. 2022 May. Accessed July 10, 2024. Available from: https://www.canada.ca/en/revenue-agency/services/benefits.html
45. Baumann A, Crea-Arsenio M, Lavoie-Tremblay M, Meershoek A, Norman P, Deber R. Exemplars in long-term care during COVID-19: the importance of leadership. *Healthcare Pol*. 2022 Jun;17(SP):27–39.
46. Ayalon L, Zisberg A, Cohn-Schwartz E, Cohen-Mansfield J, Perel-Levin S, Siegal EB. Long-term care settings in the times of COVID-19: challenges and future directions. *Int Psychogeriatrics*. 2020 Oct;32(10):1239–43.
47. Wong EKC, Thorne T, Estabrooks C, Straus SE. Recommendations from long-term care reports, commissions, and inquiries in Canada. *F1000Res*. 2021 Sep 29;10:87.
48. Wellness Hub: Understanding COVID-19 transmission though implementing and evaluating an intervention to support wellness, IPAC, vaccine uptake, and other wraparound care needs in LTCHs and Shelters. 2021 Apr 30. https://doi.org/10.17605/OSF.IO/WQRST
49. Grinspun D, Matthews JH, Bonner R, Moreno-Casbas T, Mo J. COVID-19 pandemic in long-term care: an international perspective for policy considerations. *Int J Nurs Sci*. 2023Apr 1; 10(2):158–66.

SUPPLEMENTARY MATERIALS

Supplemental material linked to the online version of the paper (https://doi.org/10.5770/cgj.28.854):

- **Appendix S1:** Background & context
- **Appendix S2:** Reflexivity statement
- **Table S1:** Wellness hub needs assessment

Correspondence to: Christine Fahim, PhD, MSc, Li Ka Shing Knowledge Institute, St. Michael's Hospital, Unity Health Toronto, 30 Bond Street, Toronto, ON, M5B 1W8
E-mail: christine.fahim@unityhealth.to